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ABSTRACT

Originally developed for the Department of Defense Schools (DoDDS) system, this learning package on developing thinking skills through literature is designed for teachers who wish to upgrade or expand their teaching skills on their own. The package includes a comprehensive search of the ERIC database; a lecture giving an overview on the topic; the full text of several papers on the topic; copies of any existing ERIC/RCS publications on the topic; a set of guidelines for completing a goal statement, a reaction paper, and an application project; and an evaluation form. (KEH)

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Learning Package #19

Developing Thinking Skills through Literature

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OVERVIEW

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Developing Thinking Skills Through Literature

(All references are fully documented in enclosed bibliography, or on reference list attached to this lecture)

by Norma Collins

Lecture

The 1980's have produced several education documents addressing the issue of reading and writing instruction. Four national assessments in reading, published under the title of the Reading Report Card (Educational Testing Service), suggested that the improvement of our national state of literacy must occur by training in higher order reading skills. Students must learn to develop personal interpretations of what they read, and to question and to think about the material drawn from their reading experience.

On the heels of the Reading Report Card came the Writing Report Card (Applebee, Langer, & Mullis, 1986), which addressed the teaching of writing. The Writing Report Card stated that students must be asked to think about information, organize their thoughts, and express them coherently. According to the report, students at all levels were deficient in higher level skills.

The Reading Report Card and the Writing Report Card followed several other reports, including A Nation at Risk (National Commission on Excellence in Education, 1983), The Carnegie Report (Branscomb, 1986), the Holmes Report (Lanier, 1986), and

the Governors' Report on Education (Alexander, 1986). Presented in each document was the need for improvement in higher order thinking skills in American schools.

The focus of our discussion in this lecture is on developing thinking skills in reading. However, you will see the connections that exist between instruction in reading and in writing. The relationship between reading and writing is based on the premise that both reading and writing are active, generative events. Such a definition implies that students are capable and responsible for constructing word and image relationships between what they know and what they read and write. It is the understanding of the relationships among the parts of the texts, and between the text and the learner's own experiences, that allows for meaning construction.

Researchers Tierney and Pearson (1983) posit that readers draw on background experiences to compose a text. There is an ongoing negotiation to arrive at meaning. This is fundamental to the act of reading. For this reason, reading offers the potential for higher level thinking. Essential to the success of higher level reading is the reader's ability to relate new information to what is known in order to find answers to cognitive questions.

Another underlying principle in the instruction of higher order thinking skills in reading is the acceptance of the theme of active learning. Literacy scholar Paulo Freire contends students

who share in the learning process are empowered by a critical consciousness of themselves as meaning makers. Freire supports the position advocated by Squire (1983) which suggests that it is language that provides the tool for meaning construction. Language is a thinking process which allows students to learn and grow.

Paradoxically, educators have had this tool at their finger tips for years, but have failed to respond to the cries for greater competency by looking to language as the source for improvement. It is within the last decade, and particularly the last five years, that schools have begun to identify ways to optimize language use to promote higher level thinking.

An impetus for the re-evaluation of standard teaching methods of reading was the National Assessment of Education Progress (NAEP) Report in 1981, which revealed that 85 percent of all 13-year-olds could correctly complete a multiple choice check on comprehension, but only 15 percent could write an acceptable sentence summarizing the paragraph read. The learners were not able to reconstruct the structure and meaning of ideas expressed by others.

Not only were students unable to reconstruct a summary, students were rarely encouraged to support an evaluative interpretation. Reading instruction reflected the lowest level of thinking; it lacked critical analysis.

Today, professional organizations and the professional literature support critical thinking in the classroom and call for teachers to guide students in developing higher level thinking skills (ERIC Digest, June, 1989). Because teaching higher level cognitive processes requires comprehension, inference, and decision making, the reading classroom is a logical place to begin. These skills have been associated with reading instruction for years. Now, instead of being enrichment skills, they have become core skills.

Teaching students to think while reading is referred to in the professional literature as "critical reading." It is defined as, "learning to evaluate, draw inferences, and arrive at conclusions based on evidence"(Carr, 1988, p. 70). Children's literature is a powerful tool for teaching critical reading. It offers children the opportunity to actively engage in texts while simultaneously considering ideas, values, and ethical questions. Through literature, students learn to read personally, actively, and deeply.

In order for active, critical reading to occur, teachers must create an atmosphere which fosters inquiry. Students must be encouraged to question, to make predictions, and to organize ideas which support value judgments. Two techniques for developing these kinds of critical reading skills include problem solving and learning to reason through reading. Each of these is discussed in an article in your Learning Package.

Developing critical reading skills through problem solving is addressed by Linda Flynn. Flynn describes an instructional model which promotes analysis, synthesis, and evaluation of ideas. She states that, "When we ask students to analyze we expect them to clarify information by examining the component parts. Synthesis involves combining relevant parts into a coherent whole, and evaluation includes setting up standards and then judging against them to verify the reasonableness of ideas" (1989, p.664). What she is describing is the process of problem solving. Flynn illustrates how to apply problem solving skills to texts. She contends passive readers can become critical readers by learning to analyze, synthesize, and evaluate the material they read.

A similar perspective is presented by Isabel Beck in the article in your packet entitled "Reading and Reasoning." Beck uses the term "reasoning" to imply higher order thinking skills. She contends, "There is no reading without reasoning" (p.677). Comprehension requires inferencing which plays a central role in reasoning and problem solving. The author points out that children's literature has the potential to engage students in reasoning activities.

When literature is approached from a problem solving perspective, students are asked to evaluate evidence, draw conclusions, make inferences, and develop a line of thinking. According to Flynn, children are capable of solving problems at all

ages and need to be encouraged to do so at every grade level. The examples she mentions which incorporate higher level thinking skills into fairy tales may provide a model for you if you choose to develop an application project from this Learning Package. You may want to experiment with a particular children's book and plan a lesson which places reasoning at the center of your instruction.

A third article in your packet, by Marilyn Wilson suggests that teachers start to re-think the way they teach reading and look critically at their own teaching/thinking processes. Wilson cautions against skills lessons that are repackaged in the name of critical thinking, but are nothing more than a renamed worksheet. She points out that teaching students to read, write, and think critically is a dramatic shift from what has generally taken place in most classrooms.

According to Wilson, critical literacy advocates the use of strategies and techniques like formulating questions prior to, during, and after reading; responding to the text in terms of the student's own values; anticipating texts, and acknowledging when and how reader-expectations are aroused and fulfilled; and responding to texts through a variety of writing activities which ask readers to go beyond what they have read, and experience the text in personal ways.

Critical thinking implies that a reader is actively and constructively engaged in the process of reading. The reader is

continually negotiating what he knows with what he is trying to make sense of. The role of background knowledge and the student's ability to draw upon it are essential to critical thinking/learning.

Wilson includes a discussion of schema theory in her article and illustrates how understanding schema theory is necessary for defining critical literacy. The author cautions against quick fixes in textbooks and workbooks that claim to be concerned with critical thinking. She asks us to think critically about our own profession, our own teaching, and our relationship with learners. The issues presented by Wilson are difficult and not easily resolved. We look forward to your reactions to the article as you respond to it in the Learning Package.

In conclusion, it is not an easy task to incorporate higher level thinking skills into the classroom, but it is a necessary one. In order for our students to participate in the informed society in which they live, students must have experiences which prepare them for life. In order to become critical thinkers, it is essential that students learn to value their own thinking, to compare their thinking and their interpretations with others, and to revise or reject parts of that process when it is appropriate.

A classroom environment which is student-centered fosters student-participation in the learning process. Learning that is both personal and collaborative encourages critical thinking. Students

who are reading, writing, discussing, and interacting with a variety of learning materials in a variety of ways are more likely to become critical thinkers.

Teachers who encourage pre-reading discussions to help readers activate prior knowledge or fill in gaps in background knowledge, set the stage for critical reading. They help students identify purposes for reading, formulate hypotheses, and test the accuracy of their hypotheses throughout the reading process. In addition, asking students to examine their own reading and learning processes creates the awareness necessary for critical reading.

Post-reading activities that extend texts provide an opportunity for teachers to check for learning. Transforming ideas from reading into artwork, poetry, dance, music, etc. is an evaluative, interpretive act that reveals the student's level of understanding.

Critical readers are active readers. They question, confirm, and judge what they read throughout the reading process. Students engaged in such activities are likely to become critical thinkers and learners. Hopefully, the materials in the Learning Package will help you develop critical thinking skills in your classroom.

Additional References

Alexander, L. (Chair). (1986). *Time for Results: The Governors' 1991 Report on Education*. Washington, DC: National Governors' Association Center for Policy Research and Analysis.

Applebee, A. N., Langer, J. A., & Mullis, I. V. S. (1986). *The Writing Report Card: Writing Achievement in American Schools*. Princeton, NJ: Educational Testing Service.

Branscomb, L. M. (Chair). *A Nation Prepared: Teachers for the 21st Century*. Washington, DC: Carnegie Forum on Education and the Economy.

Educational Testing Service. (undated). *The Reading Report Card: Progress Toward Excellence in Our Schools*. Princeton, NJ: Author.

Lanier, J. E. (Chair). (1986). *Tomorrow's Teachers: A Report of the Holmes Group*. Lansing, MI: The Holmes Group.

National Assessment of Educational Progress. (1981). *Three National Assessments of Reading: Changes in Performance, 1970-1980*. (Writing Report No. 11-R-01) Denver, CO: Educational Commission of the States.

National Commission on Excellence in Education. (1983). *A National at Risk: The Imperative for Educational Reform*. Washington,DC: Author.

Tierney, R. J., & Pearson, D. P. (1983). Toward a composing model of reading. *Language Arts*, *60*, 568-580.

ERIC CLEARINGHOUSE ON READING AND COMMUNICATION SKILLS

June 1989 DIGEST

Critical Thinking: Promoting It in the Classroom

by M. Carrol Tama

The NCTE Committee on Critical Thinking and the Language Arts defines critical thinking as "a process which stresses an attitude of suspended judgment, incorporates logical inquiry and problem solving, and leads to an evaluative decision or action." In a new monograph copublished by the ERIC Clearinghouse on Reading and Communication Skills, Siegel and Carey (1989) emphasize the roles of signs, reflection, and skepticism in this process.

Ennis (1987) suggests that "critical thinking is reasonable, reflective thinking that is focused on deciding what to believe or do." However defined, critical thinking refers to a way of reasoning that demands adequate support for one's beliefs and an unwillingness to be persuaded unless the support is forthcoming.

Why should we be concerned about critical thinking in our classrooms? Obviously, we want to educate citizens whose decisions and choices will be based on careful, critical thinking. Maintaining the right of free choice itself may depend on the ability to think clearly. Yet, we have been bombarded with a series of national reports which claim that "Johnny can't think" (Mullis, 1983; Gardner, 1983; *Action for Excellence*, 1983). All of them call for schools to guide students in developing the higher level thinking skills necessary for an informed society.

Skills needed to begin to think about issues and problems do not suddenly appear in our students (Tama, 1986; 1989). Teachers who have attempted to incorporate higher level questioning in their discussions or have administered test items demanding some thought rather than just recall from their students are usually dismayed at the preliminary results. Unless the students have been prepared for the change in expectations, both the students and the teacher are likely to experience frustration.

What is needed to cultivate these skills in the classroom? A number of researchers claim that the classroom must nurture an environment providing modeling, rehearsal, and coaching, for students and teachers alike, to develop a capacity for informed judgments (Brown, 1984; Hayes and Alvermann, 1986).

Teacher Change

Hayes and Alvermann found that coaching teachers led to significant changes in students' discussion, including more critical analysis. The supervision model that was used allowed teachers and researchers to meet for preobservation conferences in order to set the purpose for the observation. Then, each teacher's lessons were videotaped and observers made field notes to supplement the videotape. After the lesson, the researchers met to analyze the tape and notes and to develop strategies for coaching the teachers. In another post-observation meeting, the teachers and supervisors planned future lessons incorporating the changes they felt necessary to promote and improve critical discussion in the classes.

Hayes and Alvermann report that this coaching led teachers to acknowledge students' remarks more frequently and to respond to the students more elaborately. It significantly increased the proportion of text-connected talk students used as support for their ideas and/or as cited sources of their information. In addition, students' talk became more inferential and analytical.

A summary of the literature on the role of "wait time," (the time a teacher allows for a student to respond as well as the time an instructor waits after a student replies) found that it had an impact on students' thinking (Tobin, 1987). In this review of studies, Tobin found that those teachers who allowed a 3-5 second pause between the question and response permitted students to produce cognitively complex discourse. Teachers who consciously managed the duration of pauses after their questioning and provided regular intervals of silence during explanation created an environment where thinking was expected and practiced.

However, Tobin concludes that "wait time" in and of itself does not insure critical thinking. A curriculum which provides students with the opportunity to develop thinking skills must be in place. Interestingly, Tobin found that high achievers consistently were permitted more wait time than were less skilled students, indicating that teachers need to monitor and evaluate their own behavior while using such strategies.

Finally, teachers need to become more tolerant of "conflict," or confrontation, in the classroom. They need to raise issues which create dissonance and refrain from expressing their own bias, letting the students debate and resolve problems. Although content area classroom which encourages critical thinking can promote a kind of some psychological discomfort in some students as conflicting accounts of information and ideas are argued and debated, such feelings may motivate them to resolve an issue (Festinger, 1957). They need to get a feel for the debate and the conflict it involves. Isn't there ample everyday evidence of this: Donahue, Geraldo Rivera, *USA Today*?

Authors like Frager (1984) and Johnson and Johnson (1979) claim that to really engage in critical thinking, students must encounter the dissonance of conflicting ideas. Dissonance, as discussed by Festinger, 1957 promotes a psychological discomfort which occurs in the presence of an inconsistency and motivates students to resolve the issue.

To help students develop skills in resolving this dissonance, Frager (1984) offers a model for conducting critical thinking classes and provides samples of popular issues that

promote it: for example, banning smoking in public places, the bias infused in some sports accounts, and historical incidents written from both American and Russian perspectives.

If teachers feel that their concept of thinking is instructionally useful, if they develop the materials necessary for promoting this thinking, and if they practice the procedures necessary, then the use of critical thinking activities in the classroom will produce positive results.

Matthew Lipman (1988) writes, "The improvement of student thinking—from ordinary thinking to good thinking—depends heavily upon students' ability to identify and cite good reasons for their opinions."

Training students to do critical thinking is not an easy task. Teaching which involves higher level cognitive processes, comprehension, inference, and decision making often proves problematic for students. Such instruction is often associated with delays in the progress of a lesson, with low success and completion rates, and even with direct negotiations by students to alter the demands of work (Doyle, 1985). This negotiation by students is understandable. They have made a career of passive learning. When met by instructional situations in which they may have to use some mental energies, some students resist that intellectual effort. What emerges is what Sizer (1984) calls "conspiracy for the least," an agreement by the teacher and students to do just enough to get by.

Despite the difficulties, many teachers are now promoting critical thinking in the classroom. They are nurturing this change from ordinary thinking to good thinking admirably. They are 1) promoting critical thinking by infusing instruction with opportunities for their students to read widely, to write, and to discuss; 2) frequently using course tasks and assignments to focus on an issue, question, or problem; and 3) promoting metacognitive attention to thinking so that students develop a growing awareness of the relationship of thinking to reading, writing, speaking, and listening. (See Tama, 1989.)

Another new ERIC/RCS and NCTE monograph (Neilsen, 1989) echoes similar advice, urging teachers to allow learners to be actively involved in the learning process, to provide consequential contexts for learning, to arrange a supportive learning environment that respects student opinions while giving enough direction to ensure their relevance to a topic, and to provide ample opportunities for learners to collaborate.

References

Action for Excellence. A Comprehensive Plan to Improve Our Nation's Schools. Denver: Education Commission of the States, 1983. 60pp. [ED 235 588]

Brown, Ann L. "Teaching students to think as they read: Implications for curriculum reform." Paper commissioned by the American Educational Research Association Task Force on Excellence in Education, October 1984. 42pp. [ED 273 567]

Doyle, Walter. "Recent research on classroom management: Implications for teacher preparation." *Journal of Teacher Education, 36* (3), 1985, pp. 31-35.

Ennis, Robert. "A taxonomy of critical thinking dispositions and abilities." In Joan Baron and Robert Sternberg (Eds.) *Teaching Thinking Skills: Theory and Practice.* New York: W.H. Freeman, 1987.

Festinger, Leon. *A Theory of Cognitive Dissonance.* Evanston, Illinois: Row Peterson, 1957.

Frager, Alan. "Conflict: The key to critical reading instruction." Paper presented at annual meeting of The Ohio Council of the International Reading Association Conference, Columbus, Ohio, October 1984. 18pp. [ED 251 806]

Gardner, David P., *et al. A Nation at Risk: The Imperative for Educational Reform. An Open Letter to the American People. A Report to the Nation and the Secretary of Education.* Washington, DC: National Commission on Excellence in Education, 1983. 72pp. [ED 226 006]

Hayes, David A., and Alvermann, Donna E. "Video assisted coaching of textbook discussion skills: Its impact on critical reading behavior." Paper presented at the annual meeting of the American Research Association, San Francisco: April 1986. 11pp. [ED 272 734]

Johnson, David W., and Johnson, Roger T. "Conflict in the classroom: Controversy and learning," *Review of Educational Research, 49*, (1), Winter 1979, pp. 51-70.

Lipman, Matthew. "Critical thinking—What can it be?" *Educational Leadership, 46* (1), September 1988, pp. 38-43.

Mullis, Ina V. S., and Mead, Nancy. "How well can students read and write?" Issuegram 9. Denver: Education Commission of the States, 1983. 9pp. [ED 234 352]

Neilsen, Allan R., *Critical Thinking and Reading: Empowering Learners to Think and Act.* Monographs on *Teaching Critical Thinking,* Number 2. Bloomington, Indiana: ERIC Clearinghouse on Reading and Communication Skills and The National Council of Teachers of English, Urbana, Illinois, 1989. [Available from ERIC/RCS and NCTE.]

Siegel, Marjorie, and Carey, Robert F. *Critical Thinking: A Semiotic Perspective.* Monographs on Teaching Critical Thinking, Number 1. Bloomington, Indiana: ERIC Clearinghouse on Reading and Communication Skills and the National Council of Teachers of English, Urbana, Illinois, 1989. [Available from ERIC/RCS and NCTE.]

Sizer, Theodore. *Horace's Compromise: The Dilemma of the American High School.* Boston: Houghton-Mifflin, 1984. [ED 264 171; not available from EDRS.]

Tama M. Carrol. "Critical thinking has a place in every classroom," *Journal of Reading* 33 (1), October 1989.

Tama, M. Carrol. "Thinking skills: A return to the content area classroom." Paper presented at the annual meeting of the International Reading Association, 1986. 19pp. [ED 271 737]

Tobin, Kenneth. "The role of wait time in higher cognitive level learning," *Review of Educational Research, 57* (1), Spring 1987, pp. 69-95.

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ERIC Clearinghouse on Reading and Communication Skills

ERIC Digest

Critical Thinking in College English Studies

The Critical Thinking Movement

A key event in the phenomenal growth of the critical thinking movement in American higher education was Chancellor Glenn Dumke's Executive Order 338 (1980) announcing the requirement of formal instruction in critical thinking throughout the nineteen California State University campuses, serving some 300,000 students. Similar requirements quickly followed in California community colleges and high schools.

The pertinent section of Executive Order 338 reads as follows:

> Instruction in critical thinking is to be designed to achieve an understanding of the relationship of language to logic, which should lead to the ability to analyze, criticize, and advocate ideas, to reason inductively and deductively, and to reach factual or judgmental conclusions based on sound inferences drawn from unambiguous statements of knowledge or belief. The minimal competence to be expected at the successful conclusion of instruction in critical thinking should be the ability to distinguish fact from judgment, belief from knowledge, and skills in elementary inductive and deductive processes, including an understanding of the formal and informal fallacies of language and thought.

In California and elsewhere, college-level critical thinking instruction has largely been assumed to be the realm of philosophy departments. Within the discipline of philosophy, however, the critical thinking movement has turned from an emphasis on formal logic and linguistic analysis, and toward informal logic, or the application of principles of reasoning to everyday situations. The movement has also seen a growing attention to the mental attitudes and emotional "dispositions" that foster or impede critical thinking within the broader context of psychological, cultural, social, and political influences. This changing emphasis within philosophy has promoted interdisciplinary coordination of critical thinking studies with English and rhetoric along with many other fields—preeminently developmental psychology.

The stage-developmental schemas of psychologists like Piaget, Kohlberg, Gilligan, Perry, and Bloom have suggested supplementary criteria of critical thinking. (Applications of such criteria have been somewhat speculative and disputable to date, to be sure, as are stage-developmental theories in general.) These criteria include the ability to reason back and forth between the concrete and the abstract, the personal and the impersonal, the literal and the hypothetical or figurative; facility in perceiving irony, ambiguity, and multiplicity of meanings or points of view; and the development of open-mindedness, reciprocity (Piaget's term for ability to empathize with other individuals, social groups, ideologies, etc.); and autonomous thought.

Critical Thinking in Composition Studies

The incorporation of developmental psychology into critical thinking studies converges with its recent incorporation into composition research and instruction. Several reports of the National Assessment of Educational Progress have indicated that student writers' main weakness occurs in the progression from narrative and descriptive modes to modes directly requiring critical thinking—analysis, synthesis, argumentation, and evaluation of sources and ideas. Researchers in collegiate basic writing have addressed problems impeding this progression and have explored pedagogical strategies for overcoming them.

Shaughnessy's seminal *Errors and Expectations* not only pinpointed some of these cognitive impediments but also identified elements that can be considered prerequisites to critical thinking. These include the ability to concentrate, to retain material studied, to sustain an extended line of reasoning in reading or writing, and to reason back and forth among the past, present, and future. Shaughnessy further delineated students' difficulties with "the vocabulary of general literacy" (1977, 216-221), her term for the codes of academic discourse which encompass the language both of critical thinking and of what Hirsch has called "cultural literacy." Lunsford (1980), in "The Content of Basic Writers' Essays," explicitly applied Piaget and Kohlberg to the designing and evaluation of writing assignments fostering development from egocentric to reciprocal and from conventional to autonomous moral reasoning.

Composition textbooks and courses can best incorporate critical thinking—and in some cases have done so—not only in units on logic and persuasion, but in those in diction and semantics, tone, audience, and writing from sources. Several recent textbooks are expressly devoted to logic in writing, while a growing number of others combine this approach with critical reading. There is some indication that rhetorics and anthologies are moving away from a structure based on modes of exposition toward a developmental sequence of modes of reasoning designed to build critical thinking skills. Sternglass (1983) and Kytle (1986) have written textbooks and Olson (1984) and Lazere (1986) have published course descriptions structured in this way.

Kytle's *Clear Thinking for Composition,* first published nearly twenty years ago, anticipated the current emphasis on attitudes or dispositions in critical thinking instruction. Its chapter "Blocks to Logical Thinking" considers culturally conditioned assumptions, prejudice, ethnocentrism, primary certitude (absolutism), authoritarianism, and unconcretized abstractions. Other forerunners emphasizing psychological dispositions include Altick, whose *Preface to Critical Reading* first appeared in 1946, and Hayakawa, whose *Language in Thought and Action* was first published in 1941. Hayakawa's general semantics approach has been perpetuated by the journal

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et cetera, especially under Neil Postman's editorship, and the NCTE Committee on Public Doublespeak.

A political approach to critical thinking in composition courses is provided in teachers' guides by Shor (1980) and Lazere (1986). This approach generates writing assignments out of Frankfurt School critical theory, emphasizing critical consciousness toward mass culture, and out of Paulo Freire's notion of liberatory literacy.

Critical Thinking in Literary Studies

A strong case can be made that literature—properly reunified with rhetoric and composition—is the single academic discipline that can come closest to encompassing the full range of mental traits currently considered to comprise critical thinking. The mental dispositions increasingly emphasized within critical thinking circles have a familiar ring to teachers of literature and literary criticism—the capacities: to unify and make connections in one's experience; to follow an extended line of thought through propositional, thematic, or symbolic development; to engage in mature moral reasoning and to form judgments of quality and taste; to be attuned to skepticism and irony; and to be perceptive of ambiguity, relativity of viewpoint, and multiple dimensions of form and meaning (literal and figurative language, syntactic and structural complexity, etc.).

Paul (cited in Walsh and Paul 1985, 11-12) asserts that a setting that facilitates the exchange of free dialogue between opposing views is essential to any authentic exercise of critical thinking. The tradition of humanistic and creative literature is preeminently a tradition of dialogue from Socrates and Greek tragedy to Albert Camus's "civilization of dialogue." Every great work of literature engages the reader in critical dialogue with its author, language, and characters, and in the dynamic interaction that Emerson characterized as *Man Thinking*.

Moreover, a growing body of research in both English and psychology strongly indicates that neither critical thinking nor cognitive development can effectively advance except in dialectical interaction with a substantial body of domain-specific knowledge (see McPeck 1981; Hirsch 1987). Clearly, that particular body of knowledge contained in literature, in its broad sense of humanistic "letters," is eminently congenial in its subject matter and in the qualities of mind it reflects, to the essential traits of critical thinking. Nearly every other discipline has come forth to claim that it too has been fostering critical thinking all along, but in none of these is the very concept of "criticism" central as it is in literature.

No more powerful case could present itself to persuade the public of the value of reemphasizing the study of literature at all levels. Ironically, however, although many courses, textbooks, and research projects have emerged in composition for critical thinking, there are very few to date in literature. (Scholars, including Kohlberg 1981, Gilligan 1982, Meyers 1986, and Bergstrom 1983, *have* applied principles of cognitive development to the study of literary works.) What is called for is perhaps no more than a minimal rethinking of the discipline to bring the tacit component of critical thinking in literary study to the surface. The explicit effort to make critical thinking the primary reason for being of literary scholarship might well provide the rejuvenating force the profession has long been missing.

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References

Altick, Richard D., and Andrea Lunsford. *Preface to Critical Reading.* 6th ed. New York: Holt, Rinehart and Winston, 1984.

Bergstrom, Robert F. "Discovery of Meaning: Development of Formal Thought in the Teaching of Literature." *College English* 45 (1983): 745-55.

Bloom, Benjamin S., ed. *Taxonomy of Educational Objectives: Cognitive Domain/Affective Domain.* New York: David McKay Company, 1956.

Dumke, Glenn. "Chancellor's Executive Order 338." Long Beach: Chancellor's Office, California State University, 1980.

Gilligan, Carol. *In a Different Voice: Psychological Theory and Women's Development.* Cambridge: Harvard University Press, 1982.

Hayakawa, S. I. *Language in Thought and Action.* 3d ed. New York: Harcourt Brace Jovanovich, 1972.

Hirsch, E. D., Jr. *Cultural Literacy: What Every American Needs to Know.* New York: Houghton Mifflin, 1987.

Kohlberg, Lawrence. *Essays on Moral Development: Volume 1, The Philosophy of Moral Development.* San Francisco: Harper and Row, 1981.

Kytle, Ray. *Clear Thinking for Composition.* 5th ed. New York: Random House, 1986.

Lazere, Donald. *Composition for Critical Thinking: A Course Description.* Rohnert Park, Calif.: Center for Critical Thinking and Moral Critique, Sonoma State University, 1986. ED 273 959.

Lunsford, Andrea. "The Content of Basic Writers' Essays." *College Composition and Communication* 31 (1980): 278-90.

McPeck, John. *Critical Thinking and Education.* New York: St. Martin's, 1981.

Meyers, Chet. *Teaching Students to Think Critically.* San Francisco: Jossey-Bass, 1986.

Olson, Carol Booth. "Fostering Critical Thinking Skills Through Writing." *Educational Leadership* (November 1984): 28-39.

Perry, William. *Forms of Intellectual and Ethical Development in the College Years.* New York: Holt, Rinehart, Winston, 1970.

Piaget, Jean. *The Language and Thought of the Child.* New York: New American Library, 1955.

Shaughnessy, Mina P. *Errors and Expectations—A Guide for the Teacher of Basic Writing.* New York: Oxford University Press, 1977.

Shor, Ira. *Critical Teaching and Everyday Life.* Boston: South End Press, 1980. ED 183 094.

Sternglass, Marilyn S. *Reading, Writing, and Reasoning.* New York: Macmillan Publishing Co., Inc., 1983.

Walsh, Debbie, and Richard Paul. *The Goals of Critical Thinking: From Educational Ideal to Educational Reality.* Washington, D.C.: Educational Issues Department, American Federation of Teachers, 1985.

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OERI Office of Educational Research and Improvement U.S. Department of Education

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Task #1

Goal Statement

Your Name:_____

Course #:_____

Learning package:_____

The purpose of writing a goal statement is to create an expectation for yourself, to establish a purpose that you can check when you have finished reviewing the package of materials. It should be used in conjunction with your reaction statement--the commentary that you will make after working your way through the materials in the learning package.

Directions: This is a pre-reading activity. Think about the topic of this package and then look at the various materials, primarily reviewing their headlines and subheads. What does that review prompt you to want to discover through this package?

Write a goal statement of no more than one paragraph that includes the questions that you want answered or the kinds of applications that you hope the package will help you accomplish in your work. Attached please find examples of representative goal statements submitted by former students.

Mail a copy of your goal statement to your instructor. Please keep a copy for yourself because your reaction statement should be based partly on the goal statement.

My Goal Statement for this Package

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

Examples of Goal Statements

It is my expectation that this learning package will direct me in new directions so that I may improve my instruction in the area of vocabulary. I would like to know when it is best to introduce new vocabulary words. I would also like to gain information about new methods one might use when introducing new vocabulary. I expect to read about some of the newest research related to vocabulary instruction. It is also expected that tested methods will be described and examined. I would hope that these articles would help me improve how I teach so that my students will benefit and become better readers.

Following the study of this package, I expect to increase my understanding of computer usage in reading development, learn how to integrate computers into reading and writing instruction for learning impaired students, and make decisions on the usefulness of computer games in the classroom.

Following completion of this package I intend to:
1)Identify the components of a formal reading program evaluation.
2)Analyze the characteristics of an effective reading program.
3)Develop evaluation strategies that will improve the monitoring of my program objectives.

Task #2

Reaction Statement

You are asked to type a four-page reaction to this learning package as a way of firming up your sense of what you find interesting, important, or beneficial in this group of materials. You should construct this reaction with your previously established goal statement in mind.

Given below are a number of prompts to indicate the kinds of questions that you might wish to answer in developing this reaction. You may use other questions than those that are here listed. We anticipate that your reaction will be approximately four typewritten, double-spaced pages. Please use the following format in heading your paper.

Reaction

Your Name:_____

Course #:_____

Learning Package:_____

Reaction Prompts

1. Were your goals realized, and how do you know? (Refer to your goal statement.)

2. What important or beneficial ideas did you find in these materials? (Please cite the articles.)

3. Are there trends or concerns in the materials that bother you? Are there those that you agree with? Discuss. (Please use the annotated bibliography and cite ideas from it.)

4. What ideas did you want to try in your daily work world? Describe how you could apply these ideas?

Application Project

If you decide to use this topic for one of your two application projects, you may want to spend more time thinking about ways that you could explore one or more of these ideas in your work.

When you have finished your statement, please mail it to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

Task #3

Application Project

As you select your two application projects, use the following guidelines:

1. **Formulate a question** that you would like to answer regarding this topic. (For example, can my slow readers use some of the self-monitoring strategies discussed in these materials?) A question often helps to clarify the kinds of information that you will collect or the kinds of evidence that you will use to convince a reader that you are pursuing an interesting question.

2. **Describe with as much detail** as is needed for a reader to understand what you did, what materials you used, what major procedures you used, what evidence you were looking for, in order to answer your question.

3. **Gather evidence** from your students or from teachers to show samples of the kinds of work or the kinds of interactions that were taking place. These samples may be your written observations, sample student papers, photographs, activity sheets, book titles, statistical data, or any other kind of evidence that demonstrates the reality of your inquiry.

4. **Write a summary** of your plan and of your conclusions. The summary should be coherent and clear so a person who was not on site can understand what you attempted and can appreciate the conclusions that you drew.

5. **Send a report** that includes a summary of your plan, sample evidence of what you found, a brief analysis of the evidence, and the conclusions that you

6. **Provide a cover page** that gives your name, address, course number, topic of learning package, and topic of your project. We will mail you a critique of your work. Send your report to:

   Carl B. Smith
   150 Smith Research Center
   Indiana University
   Bloomington, IN 47408-2698

Course Number_____ **Date**_____

Package Title_____

Statements	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. This package will help me do my job better.					
2. The pace of the package was too fast.					
3. The package's directions were confusing.					
4. It was easy to follow the directions given in the package.					
5. The package was too easy.					
6. The package was too long.					
7. The package should include more articles and documents to read.					
8. I didn't know the meaning of many words used in the package.					
9. The lecture explicated the topic of the package.					
10. The package's objectives were clear from the start.					
11. The package's teaching points were clear.					

What did you like best about the package?

What did you like least about the package?

How would you improve the package?

Please list other topics you would be interested in studying through our program.

Name (optional)_____

Position_____

Years Taught_____

Please mail a copy of this form to:

Carl B. Smith
150 Smith Research Center
Indiana University
Bloomington, IN 47408-2698

ERIC/RCS

Selected Abstracts from the ERIC Database

ERIC Clearinghouse on Reading & Communication Skills
Indiana University
Bloomington, Indiana
(812) 855-5847

BEST COPY AVAILABLE

Sample ERIC Abstract

AN ED289160
AU Binkley,-Marilyn-R.; And-Others
TI Becoming a Nation of Readers: What Parents Can Do.
CS Heath (D.C.) and Co., Lexington, Mass,; Office of Educational Research and Improvement (ED), Washington, DC.
PY 1988
AV What Parents Can Do, Consumer Information Center, Pueblo, CO 81009 ($.50).
NT 40 p.; For Becoming a Nation of Readers: The Report of the Commission on Reading, see ED 253 865.
PR EDRS Price - MF01/PC02 Plus Postage.
DE Beginning-Reading; Literacy-Education; Parent-Attitudes; Parent-Child-Relationship; Preschool-Children; Primary-Education; Reading-Aloud-to-Others; Reading-Attitudes; Recreational-Reading; Written-Language
DE *Literacy-; *Parent-Influence; *Parent-Participation; *Reading-Instruction; *Reading-Processes
ID Reading-Motivation
AB Intended for parents and based on the premise that parents are their children's first and most important teachers, this booklet is a distillation of findings from the 1984 report of the Commission on Reading, "Becoming a Nation of Readers." The introduction reiterates the Commission's conclusions (1) that a parent is a child's first tutor in unraveling the puzzle of written language; (2) that parents should read to preschool children and informally teach them about reading and writing; and (3) that parents should support school-aged children's continued growth as readers. Chapter 1 defines reading as the process of constructing meaning from written texts, a complex skill requiring the coordination of a number of interrelated sources of information. Chapter 2, on the preschool years, focuses on talking to the young child, reading aloud to the preschooler, and teaching children about written language. The third chapter, on beginning reading, counsels parents on what to look for in good beginning reading programs in schools, and how to help the child with reading at home. The fourth chapter, on developing readers and making reading an integral part of learning, offers suggestions for helping the child succeed in school and for encouraging reading for fun. The afterword calls on teachers, publishers, and school personnel, as well as parents, to participate actively in creating a literate society. The booklet concludes with a list of organizations that provide practical help or publications for parents.

Interpretation of ERIC Abstract Field Identifiers

AN ERIC accession number (Use this number when ordering microfiche and paper copies.)
AU Author(s)
TI Title
CS Corporate source
PY Actual or approximate publication date
AV Source and price (availability)
NT Pagination and additional information (such as legibility or related documents)
PR Indicates availability of document from the ERIC Document Reproduction Service
DE Descriptors-indexing terms from the *Thesaurus of ERIC Descriptors* which indicate important concepts in the document
ID Identifiers-indexing terms not included in the *Thesaurus of ERIC Descriptors*
AB Summary

AN: ED273985
TI: Activities to Promote Critical Thinking. Classroom Practices in Teaching English, 1986.
CS: National Council of Teachers of English, Urbana, Ill.
PY: 1986
AV: National Council of Teachers of English, 1111 Kenyon Rd., Urbana, IL 61801 (Stock No. 00457, $7.00 member, $9.75 nonmember).
NT: 158 p.; Prepared by the NCTE Committee on Classroom Practices in Teaching English.
PR: EDRS Price - MF01/PC07 Plus Postage.
DE: Content-Area-Writing; Elementary-Secondary-Education; Higher-Education; Literature-Appreciation; Reading-Writing-Relationship; Speech-Skills; Writing-Instruction
DE: *Creative-Thinking; *Critical-Thinking; *Teaching-Methods
AB: Intended to involve students in language and communication study in such a way that significant thinking occurs, this collection of teaching ideas outlines ways to teach literature and composition that engage the students in such thinking processes as inferring, sequencing, predicting, classifying, problem solving, and synthesizing. The activities are divided into catagories for composition, speaking and listening, literature study, additional creative and critical thinking activities, and speaking and writing across the curriculum. The titles of the essays and their authors are as follows: (1) "Using the Poetic Voice to Teach Story Forms and Writing in the Elementary Grades" (Raymond Bailey); (2) "The Metaphor as a Metaphor for English Class" (Carole B. Bencich); (3) "Writing A Thesis Statement: A Right-Brain Activity" (Carolyn Boiarsky); (4) "Justice Is a Nike T-Shirt: Using Synectics in the ESL Writing Class" (Nancy Pfingstag); (5) "Whose Territory? Watch It!" (Derise J. Wigand and Kathleen Smith-Meadows); (6) "The Sentence: A Tool for Teaching Straight Thinking" (Walter F. Utroske); (7) "From 'Thinking Man' to 'Man Thinking': Exercises Requiring Problem-Solving Skills" (Deborah J. Barrett); (8)"Protocol Analysis for the Student Writer" (Gyde Christine Martin); (9) "Teaching Critical Listening" (Mary Bozik); (10) "Each One Teach One: A Peer Teaching/Learning Unit" (Margaret E. Rinkel); (11) "Teaching Thinking through Questioning: A Collaborative Classroom Project" (Mary H. Oestereicher); (12) "Modified Oxford Debate for Advanced Ninth Graders" (Fran Caldwell); (13) "Three R's for Critical Thinking about Literature: Reading, 'Riting, and Responding" (John W. Swope and Edgar H. Thompson); (14) "Experiencing Contemporary Drama" (George Klawitter); (15) "Collaborative Interpretation" (Sam Dragga); (16) "Adapting the Courtroom Trial Format to Literature" (Michael Segedy); (17) "Collection, Connection, Projection: Using Written and Oral Presentation to Encourage Thinking Skills" (Joseph F. Bonfiglio); (18) "Write on the Reading!" (Adele Fiderer); (19) "The Spheres of Experience: A Schema Theory for Writers" (Jeanne Gunner); (20) "Thinking through Dilemmas" (Ruth Vinz); (21) "Right On, Right Answers" (Lee Mountain and Sharon Crawley); (22) "Critical Thinking through a Community of Inquiry" (Kristine Riemann and Tony W. Johnson); (23) "Advertising Gimmicks: Teaching Critical Thinking" (Leah Rudasill) (24) "The Uses of Logic in

the College Freshman English Curriculum" (Angela A. Rapkin); (25) "Helping Students Write Historical Fiction" (Myra Zarnowski); (26) "Exposing the Edge of Thought: Taking Risks with Expressive Language" (Denise Stavis Levine); (27) "Math-Writing and Thinking" (Adele Fiderer); (28) "Teaching Critical Thinking to Management Students" (Joan M. van Courtland Moon). (HTH)

AN: EJ289486
AU: Bergstrom,-Robert-F.
TI: Discovery of Meaning: Development of Formal Thought in the Teaching of Literature.
PY: 1983
JN: College-English; v45 n8 p745-55 Dec 1983
AV: UMI
DE: Classification-; College-Students; Discussion-Teaching-Technique; English-Instruction; Higher-Education; Novels-; Reader-Response; Teaching-Methods
DE: *Abstract-Reasoning; *College-English; *Developmental-Stages; *Learning-Activities; *Literary-Criticism; *Literature-Appreciation
AB: Examines students' difficulties in reading literature and suggests methods for helping them to develop and improve skills necessary for the mature reading of literature. (MM)

AN: ED241901
AU: Bosma,-Bett[illegible]
TI: Focus on Folktales for Critical Reading.
PY: [1981]
NT: 11 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Discussion-Teaching-Technique; Elementary-Education; Grade-6; Reading-Interests; Student-Motivation; Teaching-Methods; Units-of-Study
DE: *Critical-Reading; *Critical-Thinking; *Folk-Culture; *Literature-Appreciation; *Motivation-Techniques; *Reading-Instruction
AB: A 3-month unit on folktales with two sixth-grade classes proved to be a highly motivating means of developing critical reading skills. Lessons, which generally occupied from four to six class periods each, involved four steps: (1) the teacher stated the skills to be learned and told students what was planned for the reading period each day; (2) the teacher read aloud one or more folktales appropriate to the lesson and initiated a discussion on the reading material; (3) students selected books from the collection and read them independently or with partners, giving attention to the skill for that lesson; and (4) students participated in various forms of discussion and demonstrated critical reading skills through posters, creative writing, story telling, and dramatization. Over the course of the unit, students improved their ability to classify types of folktales and to make evaluative comparisons. They continued to show strong interest in having the teacher read aloud and frequently expressed interest in reading independently. Filled with rich language,

adventure, and humor, folk literature appears particularly well adapted to the interests and needs of sixth grade students. (MM)

AN: ED235968
AU: Campbell,-Diana; McCarty,-T.-L., Ed.
TI: Teaching Guide for Indian Literature. Volume II. Reading Level 6 and Above.
CS: Rough Rock Demonstration School, Ariz. Navaho Curriculum Center.
PY: 1983
NT: 72 p.; For related document, see RC 014 407.
PR: EDRS Price - MF01/PC03 Plus Postage.
DE: American-Indians; Anthologies-; Autobiographies-; Characterization-; Elementary-Secondary-Education; Literary-Criticism; Novels-; Readability-Formulas; Reading-Achievement; Reading-Comprehension; Teaching-Methods
DE: *American-Indian-Literature; *Critical-Thinking; *Learning-Activities; *Literature-Appreciation; *Reading-Instruction
AB: The guide contains detailed suggestions for teaching 10 books about Indians to older students who read easily and are ready to be introduced to serious literature. The books are When the Legends Die; Laughing Boy; Dancehall of the Dead; The Man Who Killed The Deer; Rolling Thunder; House Made of Dawn; Yes Is Better Than No; The Man To Send Rain Clouds; American Indian Literature, An Anthology; and Son of Old Man Hat, A Navajo Autobiography. For the first five books, the guide contains study questions, tests, and reading activities which are coded according to Bloom's taxonomy of thinking. For the second five books, the guide presents a less structured instructional method including tests, some study questions, and suggestions for learning activities and large projects. The guide is geared to reading levels 6 and up and emphasizes critical writing and thinking and literary analysis. Test answers and suggested reading activities applicable to all the books are included. (SB)

AN: EJ217462
AU: Carleton,-Walter-M.
TI: A Rhetorical Rationale for Interdisciplinary Graduate Study in Communication.
PY: 1979
JN: Communication-Education; v28 n4 p332-38 Sep 1979
AV: Reprint: UMI
DE: Assignments-; Citations-References; Discussion-Teaching-Technique; Research-Projects
DE: *Graduate-Study; *Interdisciplinary-Approach; *Rhetoric-; *Speech-Communication; *Teaching-Methods
AB: Outlines the interdisciplinary problems of communication and how such problems might effectively be addressed in the graduate curricula. (JMF)

AN: EJ381707

AU: Carpenter,-Donna
TI: The Original "Fatal Attraction": Metaphorical Thinking and "Medea."
PY: 1988
JN: English-Journal; v77 n8 p42-44 Dec 1988
AV: UMI
DE: Evaluation-Methods; Greek-Literature; Secondary-Education; Synthesis-
DE: *Critical-Thinking; *English-Instruction; *Metaphors-
AB: Stresses that metaphorical thinking encourages students to see relationships and requires them to use higher level critical thinking, particularly analysis and synthesis. Describes strategies to get students to think metaphorically in order to understand the elements of Greek tragedy. (MS)

AN: ED239719
TI: Classroom Ideas-January 1982. Primary Edition.
CS: Kern County Superintendent of Schools, Bakersfield, Ca. Div. of Instructional Services.
PY: 1982
AV: Instructional Resources Center, 5801 Sundale Ave., Bakersfield, CA 93309 ($2.00).
NT: 57 p.; For related documents, see PS 013 644-667.
PR: EDRS Price - MF01/PC03 Plus Postage.
DE: Art-Activities; Childrens-Literature; Language-Arts; Mathematics-Instruction; Movement-Education; Poetry-; Primary-Education; Puzzles-; Resource-Materials; Science-Activities
DE: *Class-Activities; *Cognitive-Development; *Learning-Activities
AB: One of a series of activity guides designed to aid teachers in developing the thinking skills of primary grade students, this publication offers a variety of learning activities and resource materials. The activities and resources include: a calendar which lists important days and birthdays in January; poems; an exercise in following directions; a flannelboard story; a story development exercise; art activities; word puzzles; bibliographies of read-aloud books; science activities; mathematics activities; and body movement exercises. Many of the activities have a winter theme or are related to Alaska (the "state of the month"). An index lists the activities in four categories related to thinking skills from Guilford's Structure of the Intellect model: cognition, memory, convergent production, and divergent production. (DC)

AN: ED239732
TI: Classroom Ideas-Spring 1982. Intermediate Edition. Volume 3.
CS: Kern County Superintendent of Schools, Bakersfield, Ca. Div. of Instructional Services.
PY: 1982
AV: Instructional Resources Center, 5801 Sundale Ave., Bakersfield, CA

93309 ($2.00).
NT: 55 p.; For related documents, see PS 013 644-667.
PR: EDRS Price - MF01/PC03 Plus Postage.
DE: Childrens-Literature; Intermediate-Grades; Language-Arts; Mathematics-Instruction; Petroleum-Industry; Poetry-; Puzzles-; Resource-Materials; Science-Activities; Social-Studies
DE: *Class-Activities; *Cognitive-Development; *Learning-Activities
AB: One of a series of activity guides designed to aid teachers in developing the thinking skills of intermediate grade students, this publication offers a variety of learning activities and resource materials. The activities and resources include: a calendar which lists important days and birthdays in March, April, and May; poems; word puzzles and other puzzles; language arts activities; social studies activities; facts about the 50 states; lists of read-aloud books for fourth, fifth, and sixth grades; science activities; mathematics activities; activities to develop an awareness of the petroleum industry; and activities to develop skills in the team sport of softball. Several of the activities are related to the spring months. An index lists the activities in four categories related to thinking skills from Guilford's Structure of the Intellect model: cognition, memory, convergent production, and divergent production. (DC)

AN: ED269786
TI: Critical Thinking Skills in Secondary Language Arts.
CS: Brevard County School District, Rockledge, FL.
PY: 1985
NT: 103 p.
PR: EDRS Price - MF01/PC05 Plus Postage.
DE: Curriculum-Development; Literature-Appreciation; Logic-; Questioning-Techniques; Secondary-Education; Teaching-Methods; Test-Wiseness; Vocabulary-Development; Writing-Instruction
DE: *Cognitive-Development; *Cognitive-Processes; *Critical-Thinking; *English-Curriculum; *Integrated-Curriculum
AB: Acknowledging that reasoning ability has been identified by the College Board as one of the six basic academic competencies, this guide is intended to help secondary school language arts teachers integrate critical thinking skills into their curriculum. The guide is divided into the following sections: (1) test-taking skills (summary of college related tests, general strategies, SAT and PSAT/NMSQT, analogies, antonyms, sentence completions, reading comprehension, test of standard written English, ACT, Advanced Placement Test, and Assessment of Skills for Successful Entry and Transfer); (2) questioning strategies (Bloom's Taxonomy, sample question items, oral questioning strategies, and student-generated questioning); (3) literature (labeling thought processes, group activities, teaching poetry, projects and enrichment, bulletin board, and testing); (4) writing (clustering, freewriting, writing groups, revision strategies, sentence combining, journals, metaphors, dictation, research, and essay questions); (5) logic (patterning, making inferences, drawing

analogies, speculating/cause and effect, syllogisms, fallacies in logic, and brain teasers); and (6) vocabulary (identification of new words, context, word elements, word relationships/synonyms, antonyms, homonyms, acronyms, analogies, categories of words, Americanisms/euphemisms, and dictionary skills). (HOD)

AN: ED239211
AU: Diamond,-Joan; Beckman,-Judy
TI: Picture Books in the Language Art Curriculum, K-8.
CS: Area Education Agency 7, Cedar Falls, IA.
PY: [1980]
NT: 103 p.; The activity page for "The Alligator Under the Bed" by Joan Lowery Nixon is missing.
PR: EDRS Price - MF01/PC05 Plus Postage.
DE: Art-Activities; Childrens-Literature; Choral-Speaking; Elementary-Education; Learning-Activities; Writing-Composition
DE: *Creative-Dramatics; *Creative-Thinking; *Language-Arts; *Pantomime-; *Picture-Books; *Thematic-Approach
AB: Language arts activities for use in conjunction with 83 children's picture books are contained in this K-8 guide. Following a list of the 83 books presented alphabetically by author, the bulk of the guide consists of a page devoted to each book. These pages, also in alphabetical order by author, give the publisher's name, the publication date, a synopsis of the story, theme or activity suggestions, grade levels, and activity ideas addressed to the teacher. Many of the pages also have activity ideas addressed to the students and/or a list of materials needed. A title index cross-references the books to one or more of the following activities or themes: choral reading, listening, looking, narrative and creative pantomime, writing, point of view, illustrating, fluent thinking, flexible thinking, wishes, creating your own place, uses for things, the alphabet, and research. A third index categorizes the books according to the activities and themes. Guidelines for using narrative pantomime and for dramatizing stories complete this guide. This document is part of a collection of materials from the Iowa Area Education Agency 7 Teacher Center project. (EM)

AN: EJ216323
AU: Dill,-David-D.
TI: Teaching in the Field of Higher Education: Curriculum and/or Instruction Courses.
PY: 1978
JN: Review-of-Higher-Education; v2 n1 p35-39 Fall 1978
DE: Graduate-Study; Higher-Education; Teacher-Education; Teaching-Occupation
DE: *Course-Content; *Curriculum-Design; *Instruction-; *Postsecondary-Education-as-a-Field-of-Study; *Professional-Development; *Skill-Development
AB: Courses in curriculum and instruction representing philosophical, design and evaluation, and professional development orientations are

cited. It is suggested that a general tendency in all of these courses appears to be away from description and analysis and toward the development of skills of design, evaluation, and instruction. (SF)

AN: EJ259349
AU: Dilworth,-Collett-B., Jr.
TI: Empirical Research in the Literature Class.
PY: 1982
JN: English-Journal; v71 n3 p95-97 Mar 1982
AV: Reprint: UMI
DE: Critical-Reading; Research-Needs; Student-Participation; Student-Research
DE: *Classroom-Research; *Critical-Thinking; *Literary-Criticism; *Literature-Appreciation; *Research-Methodology
AB: Advises ways of using empirical research methodology in the classroom to nurture sustained, motivated, careful reading of literature. (RL)

AN: EJ229271
AU: Dilworth,-Collett-B., Jr.
TI: Asking Questions about Literature: A Review of Strategies.
PY: 1980
JN: Journal-of-Aesthetic-Education; v14 n2 p43-54 Apr 1980
AV: Reprint: UMI
DE: Elementary-Secondary-Education; English-Instruction; Literary-Criticism; Literature-Appreciation; Student-Reaction
DE: *Cognitive-Development; *Inquiry-; *Literature-; *Questioning-Techniques; *Teaching-Methods
AB: Presented is an overview of two types of inquiry which may be used in literature study: inquiry concerning the formal, rhetorical, and semantic features of the text and inquiry generated by the individual's response to the work. The effects of these strategies on students' higher-order cognition are considered. (Author/SJL)

AN: EJ313515
AU: Edmonds,-Carole-L.
TI: Literary Study and the Quality of Thought: Building a Case.
PY: 1984
JN: ADE-Bulletin; n79 p31-33 Win 1984
AV: UMI
DE: Higher-Education; Liberal-Arts; Two-Year-Colleges
DE: *Critical-Thinking; *Educational-Objectives; *English-Curriculum; *Literature-
AB: Discusses the value of literary study in developing critical thinking in two-year college students. (HOD)

AN: EJ339962
AU: Gambell,-Trevor-J.

TI: Literature: Why We Teach It.
PY: 1986
JN: English-Quarterly; v19 n2 p85-91 Sum 1986
DE: Aesthetic-Values; Cognitive-Development; Elementary-Secondary-Education; Humanities-; Moral-Values; Quality-of-Life; Reader-Response; Reading-Habits; Reading-Interests; Reading-Material-Selection; Reading-Writing-Relationship; Writing-Processes; Writing-Skills
DE: *Creative-Thinking; *Critical-Thinking; *Cultural-Awareness; *English-Curriculum; *English-Instruction; *Literature-Appreciation
AB: Defends the study of literature in the elementary and secondary grades for its ability to help students think both creatively and critically. Provides objectives for teaching literature such as development of perception, expression, cognitive style, aesthetic awareness, moral values, and writing ability. (SRT)

AN: EJ358382
AU: Goldberg,-Marilyn
TI: Piaget's Structuralism and the Teaching of Literature.
PY: 1987
JN: Journal-of-General-Education; v38 n4 p272-87 1987
AV: UMI
DE: Learning-Theories; Literature-Appreciation; Postsecondary-Education
DE: *Cognitive-Development; *Discussion-Teaching-Technique; *Literature-; *Piagetian-Theory; *Reader-Response; *Teaching-Methods
AB: Contrasts "layering" and "assimilating" models of learning, preferring the model in which new information is affected by and fused with previous knowledge. Considers how literature study can contribute to cognitive growth, calling for the focused use of in-class discussion to help students arrive at profound responses to literature. (DMM)

AN: EJ282983
AU: Gregory,-Marshall-W.
TI: A Radical Criticism of the Platonic Foundations of Liberal Education (or, "The soul wants what it wants").
PY: 1983
JN: Liberal-Education; v69 n1 p19-32 Spr 1983
AV: Reprint: UMI
DE: Greek-Literature; Higher-Education
DE: *College-Curriculum; *Critical-Thinking; *Educational-Objectives; *Educational-Philosophy; *Liberal-Arts; *Platonism-
AB: It is concluded from an examination of the Platonic roots of educational philosophy that learning to reason well is not enough in education, but that the most valuable activity to engage in for self-discovery is challenging, through discourse, each other's opinions. (MSE)

AN: EJ343658
AU: Heller,-Mary-F.
TI: Modeling Critical Thinking in the English Classroom.
PY: 1986
JN: Highway-One; v9 n2 p87-90 Spr 1986
DE: Literature-Appreciation; Reading-Writing-Relationship; Self-Evaluation-Individuals
DE: *Critical-Thinking; *Metacognition-; *Reading-Comprehension; *Reading-Instruction
AB: Describes a teaching method that uses metacognition to improve students' reading comprehension and overall thinking skills. (SRT)

AN: ED246399
AU: Hickerson,-Benny
TI: Extending the Reading Abilities of the Average and Above-Average Student: Critical Reading/Thinking for Gifted (and Not-So-Gifted) High School Students.
PY: 1984
NT: 20 p.; Paper presented at the Annual Meeting of the National Council of Teachers of English Spring Conference (3rd, Columbus, OH, April 12-14, 1984).
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Academically-Gifted; Content-Area-Reading; Discussion-Teaching-Technique; Reading-Ability; Secondary-Education; Teaching-Methods
DE: *Class-Activities; *Critical-Reading; *Critical-Thinking; *Literature-Appreciation; *Short-Stories
AB: Critical reading and thinking abilities can be encouraged among average and above-average secondary school students through the study of literature. One approach is to give students a study sheet on the elements of the short story. The students should be led through the elements listed and given an opportunity to express their opinions about the importance or significance of the title; the type of story; and the theme, mood, tone, point of view, and techniques used by the authors. Having modeled, by working together with the class, an analysis of the elements of one short story, students can work together in small groups to discuss a second story, using their notes as a guide for discussion. A third story can be used to introduce the technique of webbing, a graphic means of presenting related information. The individual assignment is to produce a webbing of a story of the student's choice. Another activity involves having the students create original short story awards, establishing the criteria for the award and choosing one of their short stories to be the recipient. Such activities can help students approach the tasks of analyzing what they are reading; defining important and supporting elements; and evaluating, interpreting, and supporting those evaluations. Appended are a study sheet, "Guide to the Elements of the Short Story" and several examples of the webbing technique. (HOD)

AN: EJ278690

AU: Hubbard,-Keith
TI: "Richard III: The Man, the Myth, the Reality": A Unit of Study for the Gifted.
PY: 1983
JN: History-and-Social-Science-Teacher; v18 n3 p165-69 Mar 1983
AV: Reprint: UMI
DE: Gifted-; Secondary-Education; Units-of-Study
DE: *Critical-Thinking; *English-Literature; *History-Instruction; *Interdisciplinary-Approach
AB: Designed for a ninth grade gifted history class, this interdisciplinary unit of study includes critical examination of two interpretations of the character of Shakespeare's Richard III. (RM)

AN: EJ269211
AU: Hunter,-C.-Bruce
TI: How to Put the Right Amount of Mystery into Your Teaching.
PY: 1982
JN: Learning; v11 n3 p92-94 Oct 1982
AV: Reprint: UMI
DE: Elementary-Secondary-Education
DE: *Evaluative-Thinking; *Literature-Appreciation; *Logical-Thinking; *Problem-Solving
AB: One of the best tools for sharpening students' problem solving skills can be found in the mystery story, which calls for logical thinking, paying attention to detail, and distinguishing between facts and assumptions. Activities that can help to develop problem solving skills are described along with several references to mystery magazines and stories for elementary and secondary school students. (CJ)

AN: EJ359683
AU: Kruise,-Carol-Sue
TI: Using Children's Literature in Critical Thinking Skills.
PY: 1987
JN: School-Library-Media-Activities-Monthly; v4 n2 p27-29 Oct 1987
DE: Elementary-Education; Media-Specialists; Problem-Solving; Productive-Thinking
DE: *Childrens-Literature; *Creative-Development; *Critical-Thinking; *Curriculum-Enrichment; *Humanistic-Education; *Learning-Activities
AB: This discussion of the need for learning activities which promote critical thinking skills, creativity, and affective growth in children uses Bloom's Taxonomy as a guide for designing such activities based on children's literature. Several examples of projects based on specific children's books are provided. (CLB)

AN: EJ261359
AU: Langer,-Judith-A.
TI: Reading, Thinking, Writing . . . and Teaching.
PY: 1982

JN: Language-Arts; v59 n4 p336-41 Apr 1982
AV: Reprint: UMI
DE: Educational-Assessment; Elementary-Secondary-Education; Research-Utilization; Study-Skills; Teaching-Methods; Writing-Skills
DE: *Critical-Reading; *Critical-Thinking; *English-Instruction; *Literature-Appreciation
AB: Discusses classroom situations that foster superficial discussion of literature and suggests that teachers focus on what students write rather than how, in order to encourage open exchange of ideas. (HTH)

AN: EJ3110[illegible]
AU: Lawson,-Anton-E.; Kral,-Elmer-A.
TI: Developing Formal Reasoning through the Study of English.
PY: 1985
JN: Educational-Forum; v49 n2 p211-26 Win 1985
AV: UMI
DE: Critical-Thinking; Debate-; Discussion-; Essays-; Grade-12; Grading-; Logical-Thinking; Pretests-Posttests; Secondary-Education; Sequential-Learning; Teaching-Methods; Writing-Exercises
DE: *Abstract-Reasoning; *Cognitive-Development; *English-Instruction; *Learning-Activities; *Literature-
AB: This article presents 10 practical teaching procedures to encourage students to develop formal reasoning skills. A twelfth-grade English course is used as an example. Procedures include pretesting, sequencing instruction, providing students with concrete experiences, discussing reasoning patterns and forms of argumentation, assigning argumentative writing assignments, and encouraging discussion and debate. (CT)

AN: EJ222252
AU: Logan,-Lillian-M.; Logan,-Virgil-G.
TI: Through Poetry to Creative Reading.
PY: 1980
JN: Childhood-Education; v56 n4 p206-09 Feb-Mar 1980
AV: Reprint: UMI
DE: Early-Childhood-Education; Reading-Skills
DE: *Creative-Development; *Oral-Reading; *Poetry-; *Reading-Attitudes; *Reading-Interests
AB: Tips for using nursery rhymes to stimulate creative reading attitudes in young children. (CM)

AN: ED278953
AU: Lynch,-Marion-E.
TI: Right Brain Activities to Improve Analytical Thinking.
PY: 1985
NT: 15 p.; Paper presented at the Annual Meeting of the International Reading Association (30th, New Orleans, LA, May 5-9, 1985).
PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
DE: Classroom-Techniques; Cognitive-Development; Cognitive-Processes;

Cognitive-Style; Critical-Reading; Learning-Activities; Literature-Appreciation; Reading-Strategies; Secondary-Education; Skill-Development
DE: *Brain-Hemisphere-Functions; *Critical-Thinking; *Literary-Criticism; *Reading-Instruction
AB: Schools tend to have a built-in bias toward left brain activities (tasks that are linear and sequential in nature), so the introduction of right brain activities (functions related to music, rhythm, images, color, imagination, daydreaming, dimensions) brings a balance into the classroom and helps those students who may be right brain oriented. To study Orwell's "1984" in an advanced reading class, activities were developed that used clustering (a technique that involves brainstorming and free associating and that fosters right brain activities) as a basis for information processing. Clusters were used to review the characters--first male and then female--and the story, and all information was written on the blackboard simultaneously so that the students could see the relationships between the characters and the society. The symbolic meaning of the characters, their behavior and their significance was explored in group discussions. By understanding the characters, the students were thinking creatively, seeing relationships and understanding the complexities of the book. Clustering, a right brain activity, helps students process information in a more balanced way, by aiding in perceiving, in understanding, in analyzing and drawing conclusions. (Several illustrations of group clusters are appended.) (NKA)

AN: EJ361373
AU: Markle,-Aldeen-B.
TI: Developing Critical Thinking Skills through Literature.
PY: 1987
JN: School-Library-Media-Quarterly; v16 n1 p43-44 Fall 1987
AV: UMI
DE: Elementary-Secondary-Education; Librarians-
DE: *Childrens-Literature; *Cognitive-Development; *Critical-Thinking; *Reading-Aloud-to-Others
AB: Discusses the value of literature and reading aloud in developing critical thinking skills and suggests several books to supplement the basal textbook. Ten references are listed. (MES)

AN: ED267447
AU: Matthews,-Dorothy, Ed.
TI: On Teaching Critical Thinking. Cognitive Strategies for Teaching: Poetry, Short Story, Composition, the Research Paper, Critical Reading.
CS: Illinois Association of Teachers of English, Urbana.
PY: 1986
JN: Illinois-English-Bulletin; v73 n3 Spr 1986
AV: Executive Secretary, Illinois Association of Teachers of English, 294 English Building, 608 S. Wright St., Urbana, IL 61801 ($3.00).
NT: 75 p.

PR: EDRS Price - MF01 Plus Postage. PC Not Available from EDRS.
DE: Cognitive-Ability; English-Instruction; Higher-Education; Humanities-; Literature-Appreciation; Logic-; Nonverbal-Communication; Poetry-; Rhetoric-; Secondary-Education; Semiotics-; Student-Research; Teaching-Methods
DE: *Critical-Thinking; *Writing-Instruction
AB: Exploring a variety of ways to train students to think critically within the context of writing and literature classes, this journal issue presents cognitive strategies for teaching poetry, short

stories, composition, the research paper, and critical reading. The titles of the articles and their authors are as follows: (1) "Constructing the Critical View" (Randall Stiffler); (2) "Bringing the Burger to Saigon" (Sue Howell); (3) "Listing and Clustering: A Strategy for Teaching Categorizing" (Gerald Grunska); (4) "Using Original Surveys to Promote Thinking in Library Research Projects" (Leigh Henson); (5) "Cognitive Strategies to Use with Basic Writers" (Sallyanne H. Fitzgerald); (6) "Two Strategies for Combining Thinking and Writing" (Lucille C. Bruch); (7) "Teaching Critical Thinking Across the Curriculum: Notes from a Traveling Writing Teacher" (Dora Tippens); (8) "Teaching the Critical Analysis" (Marsha C. Bryant); (9) "The Logic in Mystery" (Jay Fox and Mike Rusniak); (10) "Verbalizing Nonverbal Knowledge" (Deborah H. Pickering); (11) "Sensitizing Students to Nonverbal Language" (Patrick L. McKiernan); and (12) "A Critical Pursuit of Cues: Introducing Semiotics" (James Fulcher). (HTH)

AN: EJ370153
AU: McMillan,-Merna-M.; Gentile,-Lance-M.
TI: Commentary: Children's Literature: Teaching Critical Thinking and Ethics.
PY: 1988
JN: Reading-Teacher; v41 n9 p876-78 May 1988
AV: UMI
DE: Elementary-Education; Ethics-; Moral-Values; Role-of-Education
DE: *Childrens-Literature; *Critical-Thinking; *Ethical-Instruction; *Values-Education
AB: Describes the growing concern about the importance of teaching ethics in American schools. Advocates the return of literature to the classroom to help teach critical thinking and ethics. (ARH)

AN: EJ349031
AU: Miller,-Dan-L.
TI: The Literary Form of the 80s: Using Quotations to Teach English.
PY: 1987
JN: English-Journal; v76 n3 p52-55 Mar 1987
AV: UMI
DE: Communication-Skills; Language-Arts; Literature-; Teaching-Methods; Vocabulary-Development
DE: *Class-Activities; *Critical-Thinking; *English-Instruction;

*Instructional-Innovation
AB: Enumerates reasons for using quotations as a staple in the English classroom, such as: to lend authority to words, to summarize a concept, to motivate or inspire, or to enhance vocabulary growth. (NKA)

AN: EJ225156
AU: Moss,-Joy
TI: The Fable and Critical Thinking.
PY: 1980
JN: Language-Arts; v57 n1 p21-29 Jan 1980
AV: Reprint: UMI
DE: Elementary-Education
DE: *Critical-Thinking; *Fables-; *Gifted-; *Literature-Appreciation; *Units-of-Study
AB: Describes a unit on the fable as a literary genre that was developed for a heterogeneous class of gifted and talented children and their classmates. (DD)

AN: EJ254984
AU: Raymond,-Michael-W.
TI: Reading, Thinking and Writing in the Literature Class.
PY: 1981
JN: Exercise-Exchange; v26 n1 p34-37 Fall 1981
AV: Reprint: UMI
DE: Higher-Education; Reading-Skills; Secondary-Education
DE: *Critical-Reading; *Critical-Thinking; *English-Instruction; *Literature-Appreciation; *Writing-Skills
AB: Outlines a teaching approach that uses writing exercises as a means of encouraging students to read, analyze, and evaluate assigned literature and to express themselves creatively in light of their readings, analyses, and evaluations. (FL)

AN: EJ365840
AU: Rogers,-Theresa
TI: Exploring a Socio-Cognitive Perspective on the Interpretive Processes of Junior High School Students.
PY: 1987
JN: English-Quarterly; v20 n3 p218-30 Fall 1987
AV: UMI
DE: Cognitive-Processes; English-Curriculum; Group-Instruction; Junior-High-Schools; Literature-Appreciation; Questioning-Techniques; Reading-Research; Secondary-Education; Writing-Composition
DE: *Critical-Reading; *Critical-Thinking; *Discussion-Teaching-Technique; *Reader-Response; *Teaching-Methods
AB: Discusses a study exploring the effect of the social context of two contrasting types of discussion--question and answer, and response centered--on students' interpretation of a literary work. Concludes that certain characteristics of the question and answer discussion may

have inhibited students' interpretive responses. (JC)

AN: EJ349032
AU: Rothen,-Kathleen-J.; Langston,-Beverly
TI: Hazel, Fiver, Odysseus, and You: An Odyssey into Critical Thinking.
PY: 1987
JN: English-Journal; v76 n3 p56-59 Mar 1987
AV: UMI
DE: Epics-; Grade-10; Literary-Devices; Mythology-; Reading-Comprehension; Secondary-Education
DE: *Critical-Thinking; *English-Instruction; *Figurative-Language; *Literary-Criticism; *Literature-Appreciation
AB: Compares Richard Adams's "Watership Down" to the "The Odyssey," and offers a selection of classroom activities for students that use Adams's novel to study classic literature. (NKA)

AN: ED236628
AU: Shuman,-R.-Baird
TI: Fantasy and the Brain's Right Hemisphere.
PY: [1981]
NT: 12 p.
PR: EDRS Price - MF01/PC01 Plus Postage.
DE: Comics-Publications; Creative-Thinking; Elementary-Secondary-Education; Legends-; Literature-Appreciation; Mythology-; Science-Fiction
DE: *Cerebral-Dominance; *Child-Development; *Cognitive-Development; *Fantasy-; *Neurological-Organization; *Teacher-Role
AB: While the left hemisphere of the brain is responsible for logical and verbal activity, the right brain is the center of much of human feeling and emotion. Its vision is holistic rather than segmented or compartmentalized. Although schools today are geared almost exclusively to training the brain's left hemisphere, fantasy literature can provide children with the opportunity to engage the whole brain. As fantasy demands visualization, it immediately engages the right hemisphere. Having developed a strong background in fantasy literature, most children begin school with a good base on which teachers can build. In the early grades, fairy tales, fables, and myths should make up the storytelling and reading activities. During the middle school or junior high school years, myths such as the Icarus or Hercules legends will interest students, and as they pass through various stages of initiation the Arthurian legend will appeal to them. Science fiction is another popular type of fantasy. The study of such literature can jar students out of linear thinking, help them to synthesize ideas, and encourage them to think holistically. The teacher who is aware of how the two hemispheres of the brain operate is in an excellent position to help students achieve the kind of independent and original thinking that will result in fuller and more productive lives. (HOD)

AN: EJ341043
AU: Tanner,-Stephen-L.
TI: Education by Criticism.
PY: 1986
JN: English-Journal; v75 n6 p22-26 Oct 1986
AV: UMI
DE: Abstract-Reasoning; Cognitive-Processes; Humanities-Instruction; Literary-Criticism; Literature-Appreciation; Logical-Thinking; Secondary-Education
DE: *Critical-Thinking; *English-Instruction; *Learning-Processes; *Teaching-Methods
AB: Argues that students should exercise criticism in the classroom, but this criticism should not take the form of mere training in technical skills, indoctrination into a particular conceptual system, or theoretical speculation ungrounded in reality. (SRT)

AN: EJ349590
AU: Vandergrift,-Kay-E.
TI: Critical Thinking Misfired: Implications of Student Responses to "The Shooting Gallery".
PY: 1987
JN: School-Library-Media-Quarterly; v15 n2 p86-91 Win 1987
AV: UMI
DE: Elementary-Secondary-Education; Films-; Global-Approach; Lifelong-Learning; School-Libraries; Skill-Development; Social-Studies; World-Problems
DE: *Critical-Thinking; *Learning-Resources-Centers; *Library-Instruction; *Literature-Appreciation; *Metacognition-; *Reader-Response
AB: Cites limited meanings derived from a film, "The Shooting Gallery," by both eighth grade and library school students to support argument that students are not using critical analysis skills in responding to works of art. Developmentally-sound literature-based programs are recommended as one way to help students develop critical thinking skills. (EM)

AN: EJ280823
AU: Williamson,-David
TI: Teaching the Beginnings of Criticism.
PY: 1983
JN: Use-of-English; v34 n2 p36-43 Spr 1983
DE: Critical-Reading; Secondary-Education
DE: *Critical-Thinking; *English-Instruction; *Literary-Criticism; *Literary-Devices; *Literature-Appreciation; *Teaching-Methods
AB: Presents ideas for teaching the beginnings of literary criticism to secondary school English students that build on the confidence the students have in their command of the English language. (HOD)

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No waiver, alteration, or modification of any of the provisions hereof shall be binding unless in writing and signed by an officer of CBIS Federal.

9. DEFAULT AND WAIVER
a. If customer fails with respect to this or any other agreement with CBIS Federal to pay any invoice when due or to accept any shipment as ordered, CBIS Federal may, without prejudice to other remedies, defer any further shipments until the default is corrected, or may cancel the order.

b. No course of conduct nor any delay of CBIS Federal in exercising any right hereunder shall waive any rights of CBIS Federal or modify this Agreement.

10. GOVERNING LAW
This Agreement shall be construed to be between merchants. Any questions concerning its validity, construction, or performance shall be governed by the laws of the State of Virginia.

11. DEPOSIT ACCOUNTS
Customers who have a continuing need for ERIC documents may open a Deposit Account by depositing a minimum of $300.00. Once a Deposit Account is opened, ERIC documents will be sent upon request, and the account charged for the actual cost and postage. A monthly statement of the account will be furnished.

12. PAPER COPY (PC)
A paper copy (PC) is a xerographic reproduction, on paper, of the original document. Each paper copy has a Vellum Bristol cover to identify and protect the document.

13. FOREIGN POSTAGE
Postage for all countries other than the United States is based on the International Postage Rates in effect at the time the order is shipped. To determine postage, allow 160 microfiche or 75 (PC) pages per pound. Customers must specify the exact classification of mail desired, and include the postage for that classification with their order. Payment must be in United States funds.

BEST COPY AVAILABLE